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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,688	01/02/2001	Masashi Hachinota	Q62534	8185

7590 09/30/2005
SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

NGUYEN, STEVEN H D

ART UNIT PAPER NUMBER

2665

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/750,688	HACHINOTA, MASASHI	
	Examiner	Art Unit	
	Steven HD Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-10 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/8/2005 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Magill (USP 6343066).

Regarding claims 1-2 and 5-10, Applicant's admitted prior art (AAPA) discloses switching equipment that includes M input line buffers comprising output port queues and a distributor, an MXN crossbar type switch for switching cells based on a cross point on/off control signal, N output lines sections and an arbiter which includes contention controller, permission module and connection request module that outputs a connection permission signal to one of said input line buffers based on connection request signals outputted from said M input line buffer and outputs said cross point on/off control signal to said MXN crossbar type switch

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and said designated period is designated times of a normal timing interval of said connection permission signal in the case that said connection permission is given to one input line buffer for an external output line whose output line rate is the same that the corresponding input line has. (pages 1 and 2 of the Specification; Fig. 1). AAPA fails to expressly disclose sending the connection permission signal at a designated slower timing interval than a normal timing interval to one input line buffer that outputs cells to an external output line whose output line rate is slower than a corresponding input line rate and wherein said designated slower timing interval is a constant periodic rate which is slower than corresponding input line rates said designated slower timing interval is set so that arrival of cells at said output line sections is at a rate not greater than said output line rate, and buffer overflow and output overflow are prevented. In the same field of endeavor, Magill discloses a switch (Fig 2, ref 210) which comprises plurality of input ports and output ports (Fig 2), wherein each input port contains a plurality of queues and a distributor (Fig 3), each corresponding to an output port and arbiter (Fig 2, Ref 208) sending the connection permission signal at a designated slower timing interval than a normal timing interval to one input line buffer that outputs cells to an external output line whose output line rate is slower than a corresponding input line rate and wherein said designated slower timing interval is a constant periodic rate which is slower than corresponding input line rates said designated slower timing interval is set so that arrival of cells at said output line sections is at a rate not greater than said output line rate, and buffer overflow and output overflow are prevented (See col. 6, line 6 to col. 7, line 16, the global scheduler dynamically change grants over period larger than a normal period according to the input and output rate in order to prevent buffer overflow or overrun and overflow or overrun at the output port) and the designated rate corresponding to the

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output line rate (Col. 3, lines 57-61, the rate of the switch is corresponded to output line rate in order to prevent overflow buffer) and stored data is outputted to said plurality of external line sections being buffer-less at rates corresponding to respective input line rates when output line rates of said plurality of external line sections are at least the corresponding input line rates (Col. 6, lines 44-61, output port is buffer-less, Fig 2, Ref 212, 214 and 216).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for dynamic changing the grants period for an input port to forward the cells to the output port via a switch as disclosed by Magill into the teaching of AAPA. The motivation would have been to prevent data loss.

Allowable Subject Matter

4. Claims 3-4 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 3, the prior arts fails to disclose in case that said connection permission is given to one input line buffer which output cells to the external output line whose output line rate is slower than the corresponding input line rate said connection permission signal processing section outputs a mask signal for stopping the contention control for a designated period to said contention controller and also outputs a mask cancellation signal for canceling the stopping of said contention control after passing said designated period to said contention controller.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
9/23/05